

Brushed Aside: Dental Healthcare and the Underprivileged in America Today

An Honors Thesis (HONR 499)

by

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Abstract

Dental care for underprivileged people is problematic because they are discriminated against by insurance companies. These insurance companies rarely make it affordable or accessible for the underprivileged to have any coverage. This, in turn, causes this group to have more oral health difficulties. This thesis analyzes the major problems behind obtaining dental care for the underprivileged, the consequences for not having dental healthcare, and the solutions being found for this problem.

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Introduction

In a 2012 address to the Primary Health and Aging Subcommittee, Senator Bernard Sanders offered startling statistics concerning dental care in America, including that roughly 130 million Americans are living with no dental insurance, and that more than 16 million low-income children each year go without visiting a dentist (Dental Crisis in America 2012). This is just a quick glimpse at the staggering number of people suffering without dental care in America today. Senator Sanders further stated that “lack of dental care [...] is a problem all over this country,” before identifying particularly impacted groups of people, including “low-income Americans, racial or ethnic minorities, [...] older adults, those with special needs, and those who live in rural communities.” This thesis project aims to more deeply investigate these and other groups of people who struggle or fail to receive adequate dental care in America.

As a future member of the dental healthcare profession, I wish to better understand why underprivileged Americans suffer from a lack of dental healthcare, so that I might spread this knowledge and also use it professionally. In the fall of 2016 I will enter into Indiana University’s School of Dentistry; I aspire to one day help those who cannot afford the oral healthcare they desperately need. The school I will be matriculating at is known for “provid[ing] a comprehensive spectrum of [...] quality oral health services to individuals from any socioeconomic or cultural group” (Mission, Goals, and Vision Statement 2012).

For the purpose of this thesis, an underprivileged person is defined as an individual who cannot afford the proper dental healthcare, is neglected proper care, or has

no way to make it to the care he or she needs due to various obstacles. This thesis will investigate why the underprivileged have such a difficult time obtaining dental healthcare, the consequences for not having insurance, and current attempts to resolve this situation. As a part of this investigation, I will look at how the underprivileged are impacted by dental care in rural areas, limitations within dental insurance, dental care for those with special needs, and ineffective insurance policies, before considering several potential resolutions to these issues.

Section 1: The Consequences of Reduced Dental Care

An inability to obtain or maintain dental healthcare is a catalyst for a multitude of problems. The mouth is the gateway to the rest of the body, so a majority of nutrients are brought into the body through this one opening. When one is unable to afford to maintain the health of his or her mouth, the rest of the body is forced to suffer. The underprivileged especially go through a plethora of pain and suffering due to various consequences caused by poor oral health. This pain and suffering can also translate into depression or lowered self-esteem because of the way poor dental care portrays them to the public.

Effects of Poor Oral Health

Small dental problems can easily progress into larger problems that have the ability to negatively affect the rest of the body. Slavkin and Baum argue that dental diseases are some of the most common human illnesses and can cause widespread tooth loss due to cavities and periodontal diseases. When cavities go untreated, they turn into other problems like dental infections and can cause teeth to deteriorate. Dental infections have been linked to a variety of diseases such as increased risk for coronary heart disease, thrombosis, cerebrovascular ischemia, and stroke (Slavkin and Baum 2000). They found that there was even a slight correlation between periodontal disease and increased risk of premature births. In a case study of 124 mothers, it was found that mothers with periodontal disease had more than seven times the odds of delivering preterm babies though this correlation needs to be studied further to better understand these concepts relate (Slavkin and Baum 2000). In addition, some mothers do not have access to educational programs concerning the oral health of their babies, so their children suffer from bottle rot. Problems like these affect every level of society, but especially the underprivileged who are typically unable to afford even one dental visit per year. These are just a few of the diseases one could be forced to endure if he or she has poor oral healthcare. These problems quickly spiral out of control if not taken care of and then have the ability to affect one's quality of life.

In addition to increased chances of suffering dental diseases, poor oral health can affect people psychologically and physically in a variety of ways (Sheiham 2005). The condition of one's mouth has the ability to grant someone access to jobs, build new

relationships, and potentially portray a social status. Those who are underprivileged find that they are more often judged first by their outward appearance and that poor dental health is noticed instantaneously. Sheiham insists that “oral health influences how people grow, enjoy life, eat food, look, speak, taste, socialize, and their feelings of social well-being” (2005). An article written by Dolgin in 2007 published in the *New York Times* tells the story about anti-immigrant responses toward amnesty and features a man missing a tooth. Emailed responses about the man in this article included an enormous amount of criticism for allowing a “toothless freak” to be put on display, and people presumed that since the man was “missing a tooth, he was missing a brain” (Dolgin 2013). This article did not focus on the appearance of the man in the main photo, but people had such a strong reaction to a man missing a tooth being featured on the cover of a magazine that it speaks about society. These comments exposed a prejudice merely because the man was unable to receive oral healthcare and lost a tooth. Dolgin urges that “losing teeth and the prejudice that follows can be painful” (2013).

Quality of Life for those with Poor Oral Health

Everyday, regardless of social status, people use their mouths either to eat or communicate. Sheiham is correct when stating that “severe cavities affect nutrition, growth, and weight gain, and in children it can account for missed school days due to intense pain.” Dental illnesses that cause increased pain when chewing can sometimes cause decreased levels of folate, beta-carotene, and vitamin C [in the body] since these

minerals are typically found in crunchier foods (Sheiham 2005). Allen reports that for adults, studies have shown that about 160 million work hours are lost each year due to oral disorders, and that pain and difficulty while eating and communication problems were frequently reported by working adults (2003). For the underprivileged who already have trouble affording the necessities, the possibility of missing work due to dental pain is not an option. Quality of life is something that is taken for granted by those who are able to afford to keep their dental healthcare where it needs to be, and for the underprivileged who cannot afford treatment, these problems are amplified. Untreated dental issues carry over into all facets of life, and the underprivileged should be able to be treated as soon as possible whether they can personally afford it or not.

Mental health can also be affected by poor dental care and lead to the onset of depression and anxiety. Although few studies have been conducted thus far to examine the relationship between oral health services and mental health disorders, some conducted by Okoro et al have found certain associations between depression and periodontal disease, most likely caused by behavioral and physiological mechanisms. As described by Okoro et al, another study conducted by Genco et al reported that psychological and social measures of stress such as financial strain, which then manifest as depression, are significantly associated with periodontal disease. In turn, symptoms of depression may increase the amount of bacteria that causes dental cavities, creating a double-edged sword effect (Okoro et al 2012). Okoro et al also state that medications necessary to treat depression can sometimes cause dry mouth, and when saliva's protective properties are removed, there are far more oral health risks. The underprivileged are at a higher risk of depression and mental health problems due to the fact that they have a more difficult time

finding the resources to afford proper oral care. The mouth controls so many social interactions between people; therefore, diseases in the mouth would cause significant problems, especially when one cannot afford to seek oral healthcare treatment.

Section 2: Difficulties in Obtaining Dental Healthcare by the Underprivileged

In 2013 there were 130 million Americans in need of dental care that could not afford it (Dolgin 2013).. One third of the population experiences difficulties finding access to oral healthcare through the traditional fee-for-service private practice system (Discepolo and Kaplan 2011). Usually the prices per each individual service are entirely too high for those below, or nearly below, the poverty line. That is where Medicaid is supposed to offer some support for said procedures. Unfortunately though, Medicaid usually provides little or no reimbursement, and up to 43% of the population has no type of personal insurance, which means that the safety-net is unable to support those it was designed for (Discepolo and Kaplan 2011). In addition, Sparer notes that the trivial amount of Medicaid coverage that may be paid to an individual for dental care in one state would not be given to another person in a different state because coverage varies dramatically across the country. From 2001 to 2010, the small changes that were applied by Medicaid amounted to a decrease in dental care utilization from 40.5% to 37.0% for adults and an increase from 43.2% to 46.3% in children (Vujicic and Nasseh 2014). These numbers show the effects of adults receiving no specific dental care

reimbursements in the new legislation, and a positive start to the expansion of dental care required for underprivileged children.

Children are an important topic in this discussion because new legislation is actively trying to provide oral healthcare insurance for them but still there is not much coverage available for adults. I believe it is important to understand the advances that are being made for underprivileged children to see how far America can come, but to also juxtapose these changes with those needed for underprivileged adults.

While I appreciate the government's acknowledgement of the importance of dental care for children, I cannot help but think to myself that childhood is such a short span in people's lives, and then they have to find some type of dental care on their own. Dolgin also shares that the lack of government commitment to providing high-quality dental care to the nation's population actually suggests a gap in its commitment to social justice. The thought process behind the slight provision of oral healthcare seems to be a positive one, but the amount of coverage per person who is in need is highly below what is necessary.

Understanding Insurance

The first step in understanding the difficulties the underprivileged face while trying to obtain insurance is considering the insurance policies and how they work. Sparer explains that the most important piece of legislation to understand is the Patient Protection and Affordable Care Act (from now on called PPACA) that President Barrack

Obama enacted in late March 2010. Through PPACA an estimated 8.7 million children will gain access to extensive dental benefits by 2018 and an estimated 17.7 million adults will gain some level of dental coverage (Nasseh, Vujicic, and O'Dell 2013). This law is able to work towards these goals by focusing on six new requirements that have provided incremental efforts to contain health care costs, restructure the health delivery system, and encourage a higher quality of care (Sparer 2011). Sparer explains all six provisions with the first provision being that Medicaid be provided for all people whose income is 133% below the poverty level. The second provision is to have each state create its own insurance purchasing pool for self-employed people and those who work in small businesses. The third provision is to charge a fee to employers who have more than 50 employees but do not provide insurance coverage. The fourth provision is to provide tax credits to small businesses and low-wage workers when they provide coverage. The fifth provision is to enforce new regulations that will eliminate or minimize common insurance practices such as lifetime limits on coverage, basing premiums off of current health status, and denying coverage to those with preexisting conditions. The sixth and final provision is to impose a fiscal penalty on all individuals without insurance (Sparer 2011).

The PPACA has a large scope of influence over the world of healthcare, so it might be difficult to see exactly how this translates into better oral healthcare for the underprivileged. Some of the aforementioned provisions specifically address issues such as coverage for those previously uninsured. It has included children's dental coverage as part of the essential benefit package offered in the insurance exchanges (Sparer 2011). Children's dental coverage is now a part of the essential benefit package to be offered in

insurance exchanges, and the new commission over Medicaid is required to review the adequacy of payments towards dentists to help alleviate inability of payment for oral healthcare (Sparer 2011). The PPACA also provides funding for a variety of oral health programs such as school-based dental sealant programs, public education programs targeted to specific groups, school-based health centers, teaching health centers, and surveys put out by the Oral Health Surveillance Program (Discepolo and Kaplan 2011). This increase in programs and opportunities for those who are in need has helped provide care to a larger group of people, especially children.

While this may seem encouraging, there are several pitfalls and marginalized groups when it comes to the oral healthcare provisions. If one reads all 2,500 pages of the PPACA he or she will find that nowhere is it stated that adults are granted the same required coverage as children. Since an individual is only considered a child from birth until year eighteen of life, it is understandable that a large percentage of the underprivileged population falls under the category of adult. This large percentage is not granted any specific coverage for oral healthcare when it comes to the PPACA. Although 17.7 million adults are expected to gain some level of dental benefits as a result of the PPACA, almost all of this increase is in Medicaid, which varies from state to state (Nasseh, Vujicic, and O'Dell 2013). This means that most adults are forced to let their teeth go to ruin because they have no real government support for maintaining the health of their mouth depending on where they live. In addition, children would then be forced to find some way to be able to maintain their mouths after they turn eighteen, because they will not receive any more aid at that age.

Another shortcoming within PPACA is the fact that most dental practices are private small businesses, which are out of the scope of the legislation (Discepolo and Kaplan 2011). Dentists that work for the federal government are few and far between because private practices earn so much more if the practitioner is the owner. Knowing this, one would be hard-pressed to convince a majority of these dentists to work for the government for little to nothing when compared to what they could or are already making as a private practitioner. Even more difficult would be convincing new dentists with an average of more than \$100,000 worth of student loan debt to work for the federal government once they have graduated when Medicaid would barely reimburse them. All in all, this legislation is a helpful start, but far from what is truly needed to increase oral healthcare for the underprivileged in America.

Traveling to Offices/Sustainability in Rural Areas

Aside from the huge problem of insurance, there are barriers preventing groups of people from locating necessary dental care. According to Guay, underprivileged inner-city citizens have problems finding a dentist in their area. Most dentists do not make their way to poorer inner-city areas because they know that this community would not be able to afford the full prices they would like to charge. In rural areas, it is difficult to find enough patients to sustain a dental practice, so people in these areas are forced to travel to the nearest jurisdiction in order to obtain the care that they need (Guay 2004). For those who are mobility-restricted, Guay states that there are a variety of barriers preventing

them from care such as lack of facilities, poor daily support from caregivers, insufficient reimbursement, and inability to travel. The underprivileged are typically found in inner-urban and rural areas due to various circumstances, so the barriers keeping dentists out of these areas and the underprivileged in these areas are what need to be understood. People that come from culturally isolated groups such as newcomers to America often find that language, politics, and culture can be barriers keeping them from immediate dental care though they usually receive some type of care in the long run, but this period of waiting causes small problems to turn into bigger, less affordable problems (Guay 2004). People with special needs face a variety of problems including travel (discussed in a later section). In business, there is no point in opening up an establishment that one knows will eventually get shut down due to a low amount of customers in the area. Those who are on the outside looking in must always realize that healthcare establishments are also businesses; they are there to help others but always a business first.

Misdistribution of Dentists

In addition to location, misdistribution of dentists is a prominent deciding factor in whether someone who is underprivileged will receive oral healthcare. According to Isringhausen and associates, 45 million children and adults live in dental shortage areas in the United States alone. It is estimated that more than 6,600 dentists would be needed to overcome this tremendous barrier to oral health care that so many are facing (Isringhausen et al 2014). Due to a limited number of schools in the U.S., it would take

many years and an increased interest in becoming a dentist to be able to provide all of the professionals needed, so there will continue to be a shortage of dentists in locations easiest to serve underprivileged populations. As previously stated, the groups that are most effected by this problematic misdistribution are those who live in rural areas, those who are low-income, and those of lower socioeconomic backgrounds (Isringhausen et al 2014). They continuously suffer from the dilemma of needing help the most and receiving care the least. In the future, there is no doubt that the healthcare system will have to get creative in order to combat obstacles such as this one.

Dental Care for Those with Special Needs

One group that persistently suffers from lack of dental care is citizens with special needs. A citizen with special needs is anyone who is not elderly or an infant, and who is unable to complete daily tasks without the help of a caretaker. Physical or mental disabilities could be the reason for this group being unable to care for themselves on their own, thus needing assistance. There are a host of factors that contribute to this group having less opportunity for dental visits. As with the other groups of people, travel is always a factor if they do not already live within a reasonable distance to a dental facility. Guay emphasizes that the required specialized treatment fundamentals, or any special treatment needed in order to provide care to someone with special needs, are often outside the skillset of most practicing dentists. Guay states that most dentists are not fully taught in school how to handle, or are not comfortable handling, patients with special

needs. In some cases, caregivers are the ones who do not realize that their dependent needs treatment, or are not sure how or where to transport their dependent to receive help. Studies have shown that the caregiver's burden has been associated with significantly lower odds of preventative dental care for those with special needs, especially children (Chi, McManus, and Carle 2013). This is just one more obstacle keeping those with special needs from the dental care required. The same reasoning applies to the elderly who are dependent on caregivers to handle their oral healthcare needs but these needs end up going unmet. Perhaps if dentists had further training to accommodate specific groups such as those with special needs and the elderly, then obtaining care would be a least a little easier than it is currently.

Deportation for Those Seeking Dental Care

Searching for much needed dental care without the proper resources was thought to be reason for deportation for immigrants in America today, but further research has shed more light on this specific issue. One study conducted by López-cevallos interviewed 179 migrant and seasonal farmworkers in Oregon to understand whether deportation was a significant barrier keeping them from dental care that was needed. It was found that 87% were afraid of being deported, 58% reported poor or fair dental health, and only 20% out of those used dental care during the previous year (López-cevallos et al 2013). This fear of deportation was not associated with the use of dental care, but these numbers do once again show the number of barriers those in rural areas

face, especially if they are of a lower socioeconomic background. If nothing else, this study highlighted a language or monetary barrier that could be keeping immigrants out of dental offices due to the fact that so many reported fair or poor healthcare and less than half sought treatment.

Section 3: Current Attempts to Address Dental Care Issues for the Underprivileged

Though these problems seem overwhelming, there are different strategies being implemented in order to reduce the underprivileged devastated by poor oral health. Dental therapists are becoming a more attractive option for children in poor oral health because they are less expensive than a professional dentist and can help with primary oral healthcare needs. Another cheaper solution is that of a mid-level dental provider. These individuals are qualified to perform basic procedures at a lower cost because they are not fully certified; this also means that they charge less than dentists. Another suggestion to increase distribution of oral healthcare professionals is an increase in interprofessional education. This would mean that healthcare professionals would have at least brief training in fields besides their own, dental hygiene for example. The final plan being put into place to combat poor oral health is the changing of current insurance policies to ensure that people from all different backgrounds are able to afford some type of dental plan.

Dental Therapists

Throughout this section Friedman and Mathu-Muju suggest dental therapists as a possible solution to the long-standing “silent epidemic” of oral diseases that affect children of the underprivileged, the elderly, and those from different racial backgrounds (2014). Dental therapists face opposition due to at least one unfortunate case, but are thought to be the cheaper solution for those who are unable to afford a licensed dentist. The expansion of the dental workforce to include dental therapists would help solve this problem, especially for children because most dental therapists work in school-based programs (Friedman and Mathu-Muju 2014). Though this is not a proven solution so far, it is one that has been put into implementation for the time being, and will hopefully grow in usefulness.

Dental therapists differ from dentists when it comes down to the years of schooling involved to obtain licensure. High school graduates can become dental therapists through a two-year program, which then allows them to provide basic preventative and restorative care, usually for children, although some programs in other countries are three years long and include work done on adults (Friedman and Mathu-Muju 2014). These scientists also inform that care provided by dental therapists is restricted to cavity filling, preformed stainless steel crown fitting, simple extractions, and primary tooth pulp therapy. Extensive studies over dental therapist programs have concluded that they consistently provide equal care to that of dentists, and provided treatment for 90% of school-aged children up through high school (Friedman and Mathu-Muju 2014). Literature over dental therapists however, emphasizes the supervision over

this group of healthcare workers by dentists whether they are on-site or not for the safety of the patients (Nash et al 2014).. Though this seems like the best possible solution so far, there has been much opposition to this new idea.

Opposition against the inclusion of dental therapists into normally accepted dental practice in America is headed by none other than the American Dental Association (Friedman and Mathu-Muju 2014).. The American Dental Association and its components oppose the adoption of dental therapists because they feel that this group represents an inadequacy of service to patients when compared to dentists, even though studies conducted by Friedman and Mathu-Muju and others have shown otherwise. Private practitioners also oppose the inclusion of dental therapists because they feel that better distribution of existing dentists could solve that problem, and they also see dental therapists as competition that could negatively affect their current income and patient base, even though dental therapists are not intended to compete with dentists (Friedman and Mathu-Muju 2014). If one takes into account the cost effectiveness behind dental therapists, it is easier to understand why there is such opposition from the people who should want this group around the most.

When comparing dentists and dental therapists, it is more economically feasible to support the latter. This, of course, would mean that dental therapists have less loans to pay back and are able to support people in need of dental care, and because they pay a lot less since they spend less time in school, they make much less and are more affordable. Friedman and Mathu-Muju explain that employed general dentists averaged about \$123,000 per year whereas dental therapists are set to earn 47% less than that amount. In other countries, the cost effectiveness of dental therapists in programs for children has

been studied by Friedman and Mathu-Muju and found that prices per service were lowered, dramatically in some cases. For dental therapists potentially employed in federal healthcare, Medicaid could reimburse the fees for service since they would be lower (Friedman and Mathu-Muju 2014). Dental therapists bring a lot to the table when it comes to providing more affordable options of dental care, but they are not the only option out there.

Mid-Level Dental Providers

Mid-level dental providers such as dental hygienists are under discussion as a means of providing affordable care to the underprivileged. Understanding and expanding the scope of treatment performed by dental hygienists is a possible solution since typically, most procedures are reserved for dentists themselves. By expanding the scope of work legally allowed by hygienists, oral healthcare is being promoted in rural and remote areas where there may be a shortage of dentists to handle the amount of patients (Janis 2011). It would be immensely easier, cheaper, and faster for the underprivileged to receive preventative care without the need of dentists, so that, for example, small cavities don't lead to larger extraction operations and bills. According to Vanderbilt and associates, as of April 2011, there were 34 states that permitted dental hygienists direct access to patients so that they could receive preventative services without a prior visit to, or authorization from, a dentist. Direct access has come with the expansion of dental hygiene practice in limited settings, to the point where as many as fifteen more states may

also be considering new oral health workforce models (Vanderbilt et al 2013). By allowing an existing group to perform more procedures, more people are able to find the help they deserve.

A dental therapist is also known as a mid-level dental provider. Shaefer and Miller explain that mid-level dental providers are those that are generally permitted to perform basic preventative and restorative dental procedures under the direct, indirect, or general supervision of a dentist, and they share the goal of extending access to dental care to underprivileged populations. There are also other mid-level dental providers that could be created to suit the job at hand of serving those in need. Janis explains that the American Dental Hygiene Association has created a program for advanced dental hygiene practitioners who would essentially be able to perform the same functions as dental therapists at a reduced rate of schooling and pay. Advanced dental hygiene practitioners would also require some type of supervision, be it on or off-site, to practice. With this change, they would be able to widen the range of oral healthcare in areas such as the Pine Ridge Indian Reservation in South Dakota, where there are three dental clinics providing one dental hygienist per 40,000 people as compared to the usual one hygienist for 2,000 people (Janis 2011). The American Dental Hygienists' Association, the American Dental Association, and the federal government have all in some way supported new forms of oral professional workforce models (Vanderbilt et al 2013). Vanderbilt goes on to explain that these models include the previously mentioned dental therapist, advanced dental hygiene practitioner, and the new community dental health coordinator and dental health aide therapist. Though there are different titles and

programs for these various new oral healthcare professions, they all are centered on the idea of providing dental personnel for a lower cost.

Interprofessional Education and Scope of Influence

The next idea under consideration is that of interprofessional education, also known as IPE. IPE is defined as students from two or more professions learning about, from, and with each other, in order to enable effective collaboration to improve health outcomes, as well as multiple health workers from different professional backgrounds working together with patients, families, and communities to deliver the highest quality of care (Vanderbilt et al 2013). The goal behind IPE is to collaborate dental hygiene programs into a majority of the professional schools so that more of the patients needs are being met. For example, for a person who is underprivileged and can only afford to visit a nurse once a year; the nurse, under IPE, would be able to provide the same preventative care as a dental hygienist, all in the same visit. The ability of healthcare professionals to learn each other's jobs would only serve as a benefit to patients who are not able to travel to other locations for providers not near them. The idea of IPE is a part of the current scope of influence debate.

Scope of influence is highly debated in the health professional field because it determines what treatments each health professional is allowed to perform on patients. The question of how the average dentist should either step up and join the primary healthcare force of doctors, nurses, and nurse practitioners, or step down and delegate

regular dental procedures to other individuals is at the forefront of the discussion (Sparer 2011). If dentists could enlist, so to speak, other healthcare providers to perform dental procedures then there would be a larger scope of professionals able to serve the underprivileged in their oral healthcare needs. More opportunity for care would reduce the number of problems overall, and possibly allow for insurance to cover more procedures. Sparer states that the PPACA highly encourages integration of these different medical fields in the hopes of aiding more people, but there are no specific plans spelled out to begin this needed systemic reform. The seamless integration of the various fields seems to only have a positive outcome, but even so, it will be years before this particular change in the health system can become a reality.

Conclusions

Dental care for the underprivileged is a recurring problem in this country that needs to be better put under control. There are some solutions that if put into place in the national healthcare system, could help the situation, but it would take years for these solutions to come to fruition. For now though, all we can do is wait and see how effective the PPACA is at providing dental care to the underprivileged populations who desperately need it. With a future in the dental field, it is my goal to be able to provide dental care to those who have difficulty obtaining it. Understanding the obstacles this group faces will help me to provide services and dental opportunities where there appear to be few. Helping others is my ultimate desire in life, and being able to bring oral

healthcare to those who cannot afford it or would not get it otherwise would fulfill my desire to make a difference.

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